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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,240	06/04/2007	Mitsuma Matsuda	062933	1622

38834 7590 04/08/2009

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EXAMINER	
WIESE, NOAH S	

ART UNIT	PAPER NUMBER
1793	

MAIL DATE	DELIVERY MODE
04/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/598,240	MATSUDA, MITSUMA	
	Examiner	Art Unit	
	NOAH S. WIESE	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/22/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Application

1. The claims 1-3 are pending and presented for the examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the application.

Information Disclosure Statement (IDS)

3. The information disclosure statement (IDS) was submitted on 08/22/2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. Please refer to applicant's copy of the 1449 herewith.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim 1 is drawn to a coloration agent comprising metal powder, but it contains the limitation "using metal oxide powder contained in the metal powder". Because claim 1 is not a process claim, a limitation such as this that is an active step is not proper and makes the claimed subject matter

unclear. For purposes of examination on merits, the coloration agent of claim 1 is interpreted as *comprising* metal oxide powder that is contained in the metal powder.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitchell et al (US 5294513).

Regarding **claim 1**, the claim is drawn to a coloration agent that is comprised of metal powder and a metal oxide powder contained in the metal powder. The limitation that states the coloration agent is for use in ceramic articles is an intended use for the claimed product, and thus does not hold patentable weight. The source for the metal powder is a product-by-process limitation because the mere statement that the powder is from a certain source does not impart structural or compositional limitations on the powder. Therefore, the claimed coloration agent is understood to be a mixture of metal powder and metal oxide powder. Mitchell et al teaches encapsulated toner particles wherein said particles comprise a powder mixture that can comprise iron powder and iron oxide powder (see column 4, lines 33-42). Thus, Mitchell et al teaches a coloration agent (toner) that comprises a mixture of iron oxide and iron metal. As discussed above, this meets the limitations of claims 1 and 2, and thus the claims are anticipated by Mitchell et al.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frame (US 5278111) in view of Strange (US 4369062).

Regarding **claims 1-2**, Frame teaches a process for producing brick (ceramic) by mixing electric arc furnace dust with clay materials (see Abstract and claim 1). Frame teaches that the electric arc furnace (EAF) dust is from the manufacture of steel and thus comprises a high iron content (see Table 1). Frame teaches that the use of the EAF dust imparts significant advantages such as increased density and the reduction of waste. Frame also teaches that use of the metal waste dust imparts uniform color throughout the brick body, indicating that the metal waste dust acts as a coloration agent (see column 6, lines 1-8). The instant claims differ from Frame because Frame teaches that the coloration agent comprises a metal powder derived from electric arc

furnace dust and not from shot waste. However, it would have been obvious to one of ordinary skill in the art to modify Frame in view of Strange in order to use shot waste in place of EAF dust because Strange teaches a process for forming clay products using said shot waste.

Strange teaches a method of using shot waste by mixing iron dust separated from shot waste with clay to form briquettes (see Abstract and column 2, lines 10-17). The Strange teachings would indicate to one of ordinary skill that shot waste was known as a material that could be advantageously reused by creating materials mixed with clay. Because Strange teaches a similar process of mixing the waste with clay as Frame teaches, one of ordinary skill would have understood that the shot waste could be used as an equivalent metal waste material to produce equivalent and expected results in the Frame bricks (ceramics). When substituting shot waste into the Frame bricks, it would act as a coloration agent in the same manner as the EAF dust. Therefore, a coloration agent as disclosed in instant claims 1-2 is obvious and not patentably distinct over the teachings of Frame in view of Strange.

Regarding **claim 3**, as discussed above, Frame in view of Strange teaches a clay raw material mixed with a coloration agent that meets the limitations of instant claims 1 and 2. The clay/coloration agent would be a color developed clay.

Conclusion

11. No claim is allowed.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Noah S. Wiese whose telephone number is 571-270-3596. The examiner can normally be reached on Monday-Friday, 7:30am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Noah Wiese
01 April, 2009
AU 1793

/Karl E Group/
Primary Examiner, Art Unit 1793